

PRODUCT DESCRIPTION DOCUMENT

Experimental Tropical Cyclone Surface Wind Speed Probabilities - Graphical

APPROVED Signed by LeRoy Spayd **Date:** 4/29/05
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Experimental Tropical Cyclone Surface Wind Speed Probabilities - Graphical

Part I - Mission Connection

- a. Product Description - The Tropical Cyclone Surface Wind Speed Probabilities product is an experimental product showing probabilities in percent of sustained wind speeds equal to or exceeding 34-, 50-, and 64-knot wind speed thresholds. These wind speed probabilities are based on the track, intensity, and wind structure uncertainties in the official forecasts from the National Hurricane Center, Central Pacific Hurricane Center, and the Joint Typhoon Warning Center.
- b. Purpose – Customers have requested additional tropical cyclone probabilistic information and the National Research Council’s Fair Weather Report encourages probabilistic products. Through the experimental period from June 1 – November 15, 2005, the intent is to receive input from users to determine the benefit and usefulness of the product and the product formats.
- c. Audience - The general public is the primary target audience. However, this product will be widely used by federal, state, and local government agencies; state and local emergency managers; nations in the Americas and Caribbean, Pacific, media and maritime interests.
- d. Presentation Format – Graphical products will be displayed on the internet.
- e. Feedback Method - Continuous feedback is available via an internet page e-mail link. Those interested in supplying feedback should go to:

Atlantic/East Pacific	http://www.nhc.noaa.gov/feedback_pws_graphics.shtml
Central Pacific	http://www.prh.noaa.gov/cphc/pages/probwinds.php
West Pacific	http://www.prh.noaa.gov/guam/pages/probwinds.php

Technical questions may also be addressed to:

National Weather Service
Attn: Richard Knabb
Tropical Prediction Center
11691 S.W. 17th Street
Miami, FL 33165-2149

or e-mail to: richard.knabb@noaa.gov

Policy questions may also be addressed to:

National Weather Service
Attn: Scott Kiser
W/OS21
1325 East West Highway
Silver Spring, MD 20910

or e-mail to: scott.kiser@noaa.gov

Part II – Technical Description

- a. Format & Science Basis - The products are statistically produced and are based upon the track, intensity, and wind structure uncertainties in the official tropical cyclone forecasts produced by the respective tropical cyclone centers. Probabilities will be produced for three wind speed thresholds (34-, 50- and 64- knots) at 12 hour intervals from 0 through 120 hours. These products will provide cumulative probabilities through each 12 hour interval (e.g. 0 -12 hours, 0- 24 hours, etc.). These products will be available in a static and an animated form.
- b. Product Availability - These products will be available no earlier than 15 minutes following the issuance deadlines for routine advisories (03, 09, 15, and 21 Coordinated Universal Time – UTC) and after special advisories for all tropical and/or subtropical cyclones. Since the probabilities for all active tropical cyclones are computed over a single domain, the product cannot be issued until after the advisory issuance deadlines, to ensure all active systems are included in the probability calculations.

Static examples and a detailed description of the product are available for the following basins:

Atlantic/East Pacific	http://www.nhc.noaa.gov/feedback-pws-graphics.shtml
Central Pacific	http://www.prh.noaa.gov/cphc/pages/probwinds.php
West Pacific	http://www.prh.noaa.gov/guam/pages/probwinds.php

- c. Additional Information
A full description of other NWS Tropical Cyclone Weather Services Program Products is provided in NWSI 10-601, which is available on the Internet at:

http://www.nws.noaa.gov/directives/010/operation_services.htm